

ABSTRACT

The present invention pertains to a transmitting-receiving shared antenna that is used in portable terminals for satellite communication and terrestrial communication. A varactor diode is provided in the feeder to each antenna element of a helical antenna. A transmitting-receiving shared antenna device is obtained in which the bias voltage to be applied to each varactor diode is switched between transmission and reception to thereby change the electrical length of the antenna, permitting resonance at transmitting and receiving frequencies.